中国狭蚱属分类学综述及一新种记述
(直翅目: 短翼蚱科)

郑哲民
(陕西师范大学动物研究所,西安 710062)

摘要: 系统研究了分布于中国的狭蚱属 *Xistra* 的种类,共计有 6 种,包括 1 新种,即雅安狭蚱 *Xistra yaanensis* sp. nov.。记述了中国已记录种的引证和分布地区,提供了该属全部种类的分种检索表。新种的模式标本保存于陕西师范大学动物研究所昆虫标本室。

关键词: 直翅目; 短翼蚱科; 狭蚱属; 分类; 新种; 中国
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Taxonomic review of the genus *Xistra* Bolivar (Orthoptera: Metrodoridae) from China with description of a new species

ZHENG Zhe-Min (Institute of Zoology, Shaanxi Normal University, Xi'an 710062, China)

Abstract: The paper deals with 6 species of the genus *Xistra* Bolivar from China, including one new species from Ya'an, Sichuan, *Xistra yaanensis* sp. nov. A key to all species of the genus is provided. Type specimens of new species are kept in the Institute of Zoology, Shaanxi Normal University.

Key words: Orthoptera; Metrodoridae; *Xistra*; taxonomic; new species; China

狭蚱属 *Xistra* 为 Bolivar (1887)年建立,属模式种为 *X. gogorzae* Bolivar, 1887,同时记述了分布于菲律宾的 *X. impressa* Bolivar, 1887、*X. lurida* Bolivar, 1887、*X. similis* Bolivar, 1887、*X. ochracea* Bolivar, 1887、*X. sagittata* Bolivar, 1887 及 *X. sagittaria* Bolivar, 1887 等 6 种,并将 Tetrix corniculatus Stål, 1877 转入 *Xistra* 属中: *X. corniculatus* (Stål, 1877); Brunner von Watterwyl (1893)记述了分布于缅甸的 *X. dubia* Br.-W., 1893; Bolivar (1898)记述了分布于爪哇的 *X. tricristata* Bolivar, 1898 及分布于苏门答腊 *X. triscristata* var. *sumatrana* Bolivar, 1898; Hancock (1907)记述了分布于斯里兰卡的 *X. stylata* Hancock, 1907; Hancock (1915)记述了分布于锡金的 *X. sikkimensis* Hancock, 1915; Günther (1935)记述了分布于婆罗州的 *X. cristifera* Günther, 1935。Gunther (1939)在对 Metrodorinae (短翼蚱亚科)的修订中,发现 *Xistra* 属中组成极为不纯,因而将大部分种转移,将 *X. corniculata* (Stål, 1877), *X. sagittaria* Bolivar, 1887 及 *X. cristifera* Gunther, 1935 等 3 种转入 Scelimenae 的 *Tegottix* Hancock, 1913 属中; 将 *X. stylata* Hancock, 1907 及 X. dubia Br.-W., 1898 转入新建立的 *Xistrella* Gunther, 1939 属中; 将 *X. impressa* Bolivar, 1887 转入 *Lamellitettix* Hancock, 1902 属中; 将 *X. lurida* Bolivar, 1887、*X. similes* Bolivar, 1887 及 *X. ochracea* Bolivar, 1887 转入 *Pseudoparatettix* Gunther, 1937 属中; 将 *X. tricristata* Bolivar, 1898 及 *X. tricristata* var *sumatrana* Bolivar, 1898 转入新建立的 *Lamellitettigodes* Gunther, 1939 属中; 将 *X. sagittata* Bolivar, 1887 转入 *Paratettix* Bolivar, 1887 属中。郑哲民(1988)记述了分布于中国西藏地区的 *X. laticorna* Zheng, 1988; 郑哲民和蒋国芳(1998)年记述了分布于广西的 *X. longzhouensis* Zheng *et* Jiang, 1998; Ingrisch (2001)记述了分布于尼泊尔的 *X. angusta* Ingrisch, 2001 及 *X. longicornis* Ingrisch, 2001; 郑哲民和蒋国芳(2002)记述了分布于广西的 *X. nigritibialis* Zheng *et* Jiang, 2002; 梁铭球和蒋国芳(2004)记述了分布于广西的 *X. longidorsalis* Liang *et* Jiang, 2004; 郑哲民(2005)记述了分布于西藏地区的 *X. medogensis*

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作者简介:郑哲民,男,1932 年 2 月生,教授,主要从事于蝗虫分类学研究,E-mail: zhengzhemin@163.com
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Zheng, 2005; Ingrisch (2006)将 *X. sikkimensis* Hancock, 1915 转入 *Euparatettix* Hancock, 1904 属中。至此,*Xistra* 属中共计有 8 种, 作者在整理中国的狭蚱属种类时, 又发现一新种, 并记述如下。

狭蚱属 *Xistra* Bolivar, 1887

Xistra Bolivar, 1887, *Ann. Soc. Entomol. Belg.*, 31: 242; Kirby, 1914, Fauna Brit. India Orthoptera Vol. 1 Acrididae, pp55; Hancock, 1915, *Rec. Ind. Mus. Calcutta*, 11; Gunther, 1939, *Abh. Mus. Tierk. Volkerk. Dresden*, 20(A): 159 – 160; Shishodia, 1991, Rec. Zool. Surv. India, Occ. Paper no. 140, 103 – 105; Liang and Zheng, 1988, Fauna Sinica, Insecta. Vol. 12, Ortho., Tetrigoidea, 102; Zheng, 2005, *Journal of Huazhong Agricultural University*, 24(2): 129 – 132; Zheng, 2005, Fauna of Tetrigoidea from Western China, 124.

模式种: *Xistra gogorzae* Bolivar, 1887

头顶常凹陷, 头顶的侧缘明显高出于复眼之上, 复眼高出于头顶; 侧面观, 颜面倾斜, 颜面隆起在触角之间略突出。触角着生于复眼下缘之下, 丝状, 细长。前胸背板狭长, 前缘平截, 后突长, 肩角钝; 前胸背板侧片向外翻, 狭, 后角顶斜切。前翅长卵形, 后翅发达。前足股节侧扁, 上缘隆线完整; 后足跗节第 1 节等于或略长于第 3 节。

已知 9 种, 主要分布于菲律宾、尼泊尔和中国。

狭蚱属分种检索表

1(4) 头部前面观, 头顶形成一"V"形深凹陷

2(3)"V"形凹陷较深, 底部到达复眼内缘的中部; 侧面观前胸背板上缘在肩部明显隆起, 其后形成一凹陷。分布于菲律宾……………… 歌哥狭蚱 ***X. gogorzae*** **Bolivar, 1887**

3(2)"V"形凹陷较浅, 底部到达复眼内缘上 1/3 处; 侧面观前胸背板上缘平直。分布于广西 ……………… 黑胫狭蚱 ***X. nigritibialis*** **Zheng *et* Jiang, 2002**

4(1) 头部前面观, 头顶形成一底部较平的"U"形凹陷

5(8) 头顶与一眼等宽

6(7) 肩部之间具一对短纵隆线; 侧单眼位于复眼下缘之间; 后足胫节黄褐色。分布于西藏 ……………… 侧角狭蚱 ***X. laticorna*** **Zheng, 1988**

7(6)肩部之间不具一对短纵隆线; 侧单眼位于复眼前缘下 1/3 处; 后足胫节上具 3 个黑环。分布于广西 ……………… 长背狭蚱 ***X. longidorsalis*** **Liang *et* Jiang, 2004**

8(5)头顶狭于一眼宽

9(14)侧面观前胸背板上缘平直; 后翅不到达或到达后突的顶端

10(11) 颜面隆起在触角之间的宽度宽于触角基节宽; 在肩部之间具一对短纵隆线; 在肩部后侧缘具一对突起; 后足胫节褐色。分布于广西 ……………… 龙州狭蚱 ***X. longzhouensis*** **Zheng *et* Jiang, 1998**

11(10) 颜面隆起在触角之间的宽度狭于触角基节宽; 在肩部之间不具一对短纵隆线; 在肩部后侧缘不具一对突起

12(13) 侧单眼位于复眼前缘下 1/3 处; 后翅到达后突的顶端; 后足胫节黑色, 基部和中部具淡色环。分布于四川 ……………… 雅安狭蚱 ***X. yaanensis*** **sp. nov.**

13(12) 侧单眼位于复眼下缘之间; 后翅不到达后突的顶端; 后足胫节黄褐色。分布于西藏 ……………… 墨脱狭蚱 ***X. medogensis*** **Zheng, 2005**

14(9) 侧面观前胸背板上缘在肩部前具 2 个丘形隆起或鸡冠状; 后翅超过前胸背板的顶端

15(16) 头顶前缘略突出; 侧面观, 颜面隆起在复眼之间稍突出; 颜面隆起侧缘近平行; 侧面观前胸背板上缘在肩部前具 2 个丘形隆起; 后突到达后足胫节顶 1/4 处; 后翅到达或超过后足胫节顶端; 体表具细颗粒。分布于尼泊尔 ……………… 瘦狭蚱 ***X. angusta*** **Ingrisch, 2001**

16(15) 头顶前缘平截; 侧面观, 颜面隆起在复眼之间明显突出; 颜面隆起侧缘上部较狭而下部宽; 侧面观前胸背板上缘在肩部之间呈鸡冠状突起; 后突几到达后足胫节中部; 后翅到达后足胫节顶端; 体表具有较大的瘤突。分布于尼泊尔 ……………… 长角狭蚱 ***X. longicornis*** **Ingrisch, 2001**

Key to the species of *Xistra* Bolivar

1(4) Head in front view, vertex V-shaped

2(3) V-shape concavity deeper, reaching the middle of the inner margin of eyes; in profile, upper margin of pronotum convex between shoulders. Distribution: Philippine ……………… ***X. gogorzae*** **Bolivar, 1887**

3(2) V-shaped concavity shallow, reaching upper one third of the inner margin of eyes; in profile, upper margin of pronotum straight. Distribution: China (Guangxi) ……………… ***X. nigritibialis*** **Zheng *et* Jiang, 2002**

4(1) Head in front view, vertex U-shaped

5(8) Width of vertex as wide as the width of an eye

6(7) With a pair short longitudinal keels between shoulders; lateral ocelli placed in the lower margin of eyes; hind tibia yellow brown. Distribution: China (Xizang) ························ ***X. laticorna* Zheng, 1988**

7(6) Without a pair short longitudinal keels between shoulders; lateral ocelli placed in the lower one third of anterior margin of eyes; hind tibia with three black rings. Distribution: China (Guangxi) ························ ***X. longidorsalis* Liang *et* Jiang, 2004**

8(5) Width of vertex narrower than the width of an eye

9(14) In profile, upper margin of pronotum straight; hind wing not reaching or reaching the top of hind process of pronotum

10(11) Width of frontal ridge wider than the width of basal segment of antennae; with a pair short longitudinal keels between shoulders; dorsum of pronotum with a pair projections behind shoulders; hind tibia brown. Distribution: China (Guangxi) ························ ***X. longzhouensis* Zheng *et* Jiang, 1998**

11(10) Width of frontal ridge narrower than the width of basal segment of antennae; without a pair short longitudinal keels between shoulders; dorsum of pronotum without a pair projections behind shoulders

12(13) Lateral ocelli placed the lower one third of anterior margin of eyes; hind wing reaching the top of hind femur; hind tibia black, with light rings in the basal and middle part of tibia. Distribution: China (Sichuan) ························ ***X. yaanensis* sp. nov.**

13(12) Lateral ocelli placed the lower margin of eyes; hind wing not reaching the top of hind femur; hind tibia yellow brown. Distribution: China (Xizang) ························ ***X. medogensis* Zheng, 2005**

14(9) In profile, upper margin of pronotum with two convexities or crest; hind wing reaching behind the top of pronotum

15(16) Anterior margin of vertex slightly projecting; in profile, frontal ridge projecting between eyes slightly; lateral margins of frontal ridge parallel; in profile, upper margin of pronotum with two convexities; hind process of pronotum reaching one fourth the top of hind tibia; hind wing reaching or reaching behind the top of hind tibia; surface with very fine granules. Distribution: Nepal ························ ***X. angusta* Ingrisch, 2001**

16(15) Anterior margin of vertex truncate; in profile, frontal ridge projecting between eyes distinctly; lateral margins of frontal ridge very narrow in dorsal area and widened in lower area; in profile, upper margin of pronotum undulating crest between shoulders; hind process of pronotum nearly reaching the middle of hind tibia; hind wing reaching the top of hind tibia; integument granular and tuberculate. Distribution: Nepal ························ ***X. longicornis* Ingrisch, 2001**

1 侧角狭蚱 *Xistra laticorna* Zheng, 1988

Xistra laticorna Zheng, 1988, Insects of Mt. Nanjagbarwa Region of Xizang, 48 – 49; Liang and Zheng, 1998, Fauna Sinica, Insecta Vol. 12, Orth., Tetrigoidea, 103; Zheng, 2005, Fauna of Tetrigoidea from Western China, 125 – 126.

观察标本: 2♂1♀, 西藏: 墨脱(西让), 2002-05-19。

分布: 西藏。

2 黑胫狭蚱 *Xistra nigritibialis* Zheng *et* Jiang, 2002

Xistra nigritibialis Zheng *et* Jiang, 2002, *Acta Entomologica Sinica*, 45 (Suppl.): 9 – 10; Zheng, 2005, Fauna of Tetrigoidea from Western China, 126 – 127.

观察标本: 1♂1♀, 广西: 龙州, 1998-10-09。

分布: 广西。

3 长背狭蚱 *Xistra longidorsalis* Liang *et* Jiang, 2004

Xistra longidorsalis Liang *et* Jiang, 2004, *Acta Zootaxonomica Sinica*, 29(1): 117; Zheng, 2005, Fauna of Tetrigoidea from Western China, 128.

观察标本: 2♀, 广西: 田林(李闹山), 2002-05-29。

分布: 广西。

4 龙州狭蚱 *Xistra longzhouensis* Zheng *et* Jiang, 1998

Xistra longzhouensis Zheng *et* Jiang, 1998, Grasshoppers and Locusts from Guangxi, 303 – 304; Zheng, 2005, Fauna of Tetrigoidea from Western China, 128 – 129.

观察标本: 1♂1♀, 广西: 龙州(弄岗), 1994-05-27。

分布: 广西。

5 墨脱狭蚱 *Xistra medogensis* Zheng, 2005

Xistra medogensis Zheng, 2005, *Journal of Huazhong Agricultural University*, 24(2): 130 – 131; Zheng, 2005, Fauna of Tetrigoidea from Western China, 129 – 131.

观察标本: 2♀, 西藏: 墨脱, 2003-08-16。

分布: 西藏。

6 雅安狭蚱, 新种 *Xistra yaanensis* sp. nov. (图 1~3)

雄性: 体小型, 狭长。头部高出于前胸背板之上; 头顶狭, 明显狭于一眼宽, 前缘圆弧形, 不突出于复眼之前, 侧缘平行而反折, 中隆线明显; 前面观, 头顶呈"U"形凹陷, 侧缘与复眼上缘平; 侧面观, 头顶不突出于复眼前缘, 颜面隆起在触角之间弧形突出; 颜面隆起在触角之间的宽度狭于触角

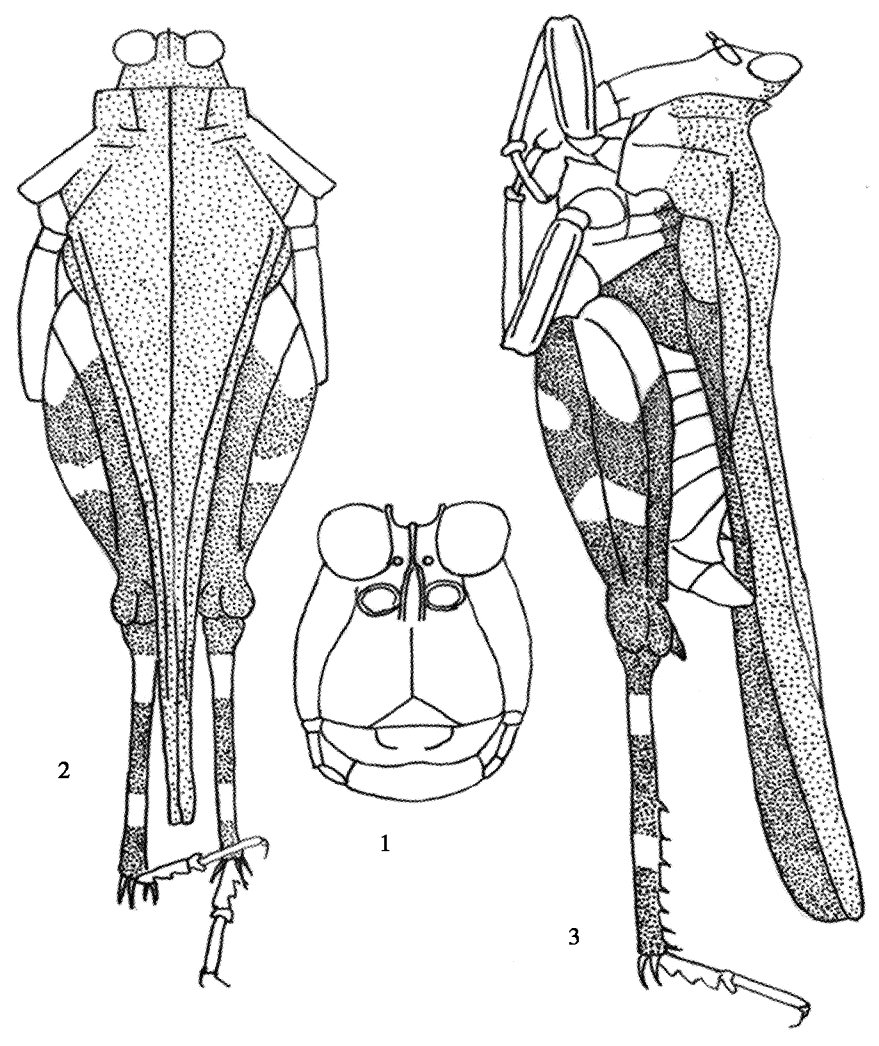


图 1 ~ 3　雅安狭蚱

Figs. 1 - 3　*Xistra yaanensis* sp. nov.

1. 头部前面观 Head, front view; 2. 整体背面 Body, dorsal view; 3. 整体侧面 Body, lateral view.

表 1　雅安狭蚱与近缘种之主要区别

Table 1　Main differences between *Xistra yaanensis* sp. nov. and its allies

	龙州狭蚱 *X. longzhouensis*	雅安狭蚱 *X. yaanensis*	墨脱狭蚱 *X. medogensis*
颜面隆起在触角间宽度	宽于触角基节宽	狭于触角基节宽	狭于触角基节宽
侧单眼位于复眼	前缘下 1/3 处	前缘下 1/3 处	下缘之间
肩部之间	具一对短纵隆线	不具一对短纵隆线	不具一对短纵隆线
肩部后侧缘	具一对突起	不具一对突起	不具一对突起
后翅	到达后突顶端	到达后突顶端	不到达后突顶端
后足胫节	褐色	黑色，中部具 2 淡色环	黄褐色

基节宽。触角丝状，着生于复眼下缘之下。复眼圆球形，突出；侧单眼位于复眼前缘下 1/3 处。前胸背板背面密具细小颗粒；前缘平直，中隆线全长明显；侧面观背板上缘近平直，仅肩部处微突起；沟前区侧隆线短，几平行，后端略收缩；肩角钝角形；后突长锥形，顶端几达后足胫节顶端；前胸背板侧片外翻，后缘具 2 凹陷，后角端部平截。前翅长卵形，顶圆；后翅发达，到达后突的顶端。前足股节

略扁，上、下缘平直，并略宽于中足股节；中足股节上、下缘平直，中足股节的宽度与前翅能见部分等宽；后足股节粗壮，膝前齿直角形，膝齿尖锐；后足胫节外侧具刺6～7个，内侧具刺6个；后足跗节第1节与第3节等长，第1跗节下之三垫等长，顶钝。下生殖板短锥形。

体背面黑褐色，颜面灰白色，头部背面黑褐色；前胸背板黑褐色，侧片下半部灰白色；前翅黑褐色；后翅黑色；后足股节外侧黑褐色，具二灰白色斑，内侧黄褐色；后足胫节黑色，中部具二淡色环；胸、腹部腹板全黑色。

雌性：未知。

体长：♂7.5～8 mm；前胸背板长：♂11～12 mm；后足股节长：♂5～6 mm。

正模♂，四川：雅安，2004-07-20，吴亮采；副模1♂，同正模。

该新种近似于龙州狄蚱 *X. longzhouensis* Zheng *et* Jiang，1998 及墨脱狭蚱 *X. medogensis* Zheng，2005，主要区别见表1。

词源：种名以模式产地 Ya'an 为名。

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Appendix: Brief descriptions of new taxa

***Xistra yaanensis* sp. nov.** (Figs. 1－3)

The new species resembles *X. longzhouensis* Zheng *et* Jiang, 1988 and *X. medogensis* Zheng, 2005, but differs from both by the hind tibia black, with two light rings in the middle. It differs from *X. longzhouensis* in: 1) width of frontal ridge narrower than the width of basal segment of antennae; 2) without a pair short longitudinal keels between shoulders; 3) dorsum of pronotum without a pair of projections behind shoulders. Meanwhile, it differs from *X. medogensis* in: 1) lateral ocelli placed in the lower one third of anterior margin of eyes; 2) hind wing reaching the top of hind femur.

Length of body: ♂7.5－8 mm; length of pronotum: ♂11－12 mm; length of hind femur: 5－6 mm.

Holotype ♂, Sichuan: Ya'an, 103°1′E, 30°N. 20-July-2004, collected by Wu Liang; paratype 1 ♂, same data as holotype.

Etymology: The specific name is derived from the type locality Ya'an.